Pricing Sustainability in the Cross-Section of Stock Returns

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Summary

- The article fits in the wide range of studies on the pricing of CSR-investments, which does - so far - not come to a clear conclusion.
- The study first builds its own ‘sustainability factor’, which is added to Fama & French’s 3 and 5 factors models as an extra explanatory stock pricing factor.
- The study concludes that high CSR portfolios show better returns during the 2007/09 GFC, but lower returns afterwards.

General remarks

- How is survivor bias in the sample dealt with?
- How is data mining dealt with?
  - 586 stocks are included in the sample, while the study is based on CSR info on more than 1570 companies
  - The sample suffers from large amounts of unreported information
- Index construction:
  - On page 7 “cut-offs for worst and best as well as small and large firms are at the 50th percentile” whereas above tables 3.x “the cut-offs for small and large firms are below the 30th percentile and above the 70th percentile”. How can you justify these cut-offs?

- Why do you use an own scoring of SRI? Why do you not use scorings such as RobecoSam, FTSE4GOOD, etc indices?
- Why do you use the metrics as described on p 21-22 ? External social relations and Governance are underrepresented in this list.
- Which weights do you give to these CSR criteria? Do you give different weights to different sectors? Why (not)? See https://www.robecosam.com/media/2/8/7/287bd22a725dba41d53341c621c1cea7_robecosam-corporate-sustainability-assessment-weightings-2018_tcm1011-14374.pdf for RobecoSam scores weightings on 45 criteria for 60 industries.

- If own scoring is used, why do you consider ordinal data (80% of inputs is Boolean data) and not ordinary data? Do you not leave significant information?
- Is there any sector bias linked to the construction of the 10 “best-worst” portfolios?
- Portfolio 5 is very small. Is it still giving valuable results?
- Can you compare the crisis period (2 years) with the post crisis period (8 years) ? I think that US companies have also suffer from the 2011-2013 Euro-crisis.

Results

- All portfolios have an average return higher than the market, even the worst in terms of sustainability.
- Crisis period
  - Best performing (in terms of average return) is portfolio 9, worst performing is portfolio 1.
  - Worst 30th pct (in terms of sustainability): -0.29% versus best 30th pct: 0.88%
  - Russell 3000: -1.96%; S&P500: -1.41%
- Post crisis period
  - Best performing is portfolio 2, worst performing is portfolio 10.
  - Worst 30th pct: 1.77% versus best 30th pct: 1.48%
  - Russel 3000: 1.02%; S&P500: 1.13%
- Have you been aware of this fact?

- You draw conclusions based on average return but it is essential to take into account the risk of your porfolios. For example, you calculate the sharpe ratio and standard deviation but you do not draw any conclusion.

Sustainable edge factor vs Fama & French 5 factors model

- Full time period
  - No significant impact on constant
  - No significant improvement of R^2
- Crisis period
  - Some impact on constant
  - No improvement of R^2
- Post crisis period
  - No significant impact on constant
  - Some improvement of R^2

Fama & Macbeth regression

- Some ‘risk premium’ for the sustainability factor.
- Notable improvement of R^2.

Review of literature

- Xiao, Faff & Ghargori (2013): An empirical study of the world price of sustainability.
  - Conclude that sustainable investments do not have a cost; investors are free to invest SRI or not
- Brammer, Brooks & Pavelin (2006): Corporate Social Performance and Stock Returns: UK evidence from disaggregate measures.
  - Conclude that companies with high social scores have lower financial returns

- Statistical model :
- Wittkowski published in 2007.
- Are any newer models available?
  - Greene & Henscher: Modeling Ordered Choices: A Primer (2009)
  - Alan Agresti: Analysis of Ordinal Categorical Data (2nd edition 2010)